

IN THE CLAIMS:

1. (currently amended) A method for ~~hemofiltration~~ extracorporeal blood treatment, comprising the steps of:

providing a blood treatment machine including at least two pumps and a disposable filter;

a fluid circuit including a blood withdrawal line, a blood return line, and a waste line

being connected to said filter;

a replacement fluid line connected to said tubing set to dilute blood carried in at least one

of said blood return and blood withdrawal lines;

connecting said waste, replacement fluid, and said blood withdrawal lines to engage at

least one pump of said blood treatment machine;

said step of connecting including closing a single engagement element of said blood

treatment machine such that all of said waste, replacement fluid, and said blood

withdrawal lines are engaged with said at least one pump in a single step;

withdrawing blood through a blood withdrawal line at a rate of at least 300 ml/min.;

passing the blood through a filter to remove waste;

and passing the filtered blood through a blood return line and into the patient, wherein

blood is withdrawn from and returned to the patient continuously for about 1.5 hours, and

wherein the ~~ratio of the clearance rate to~~ blood flow rate is at least ~~100:400~~ 400 ml./min.
2. (Original) The method of claim 1, further comprising the step of repeating the procedure at

least four times per week.
3. (Original) The method of claim 1, wherein the filter is disposable.

4. (Original) The method of claim 1, wherein the blood withdrawal line, the filter, and the blood return line are pre-attached.
5. (Original) The method of claim 1, wherein an amount of replacement fluid is added to the blood, and wherein the amount is determined by gravimetric balancing of the replacement fluid and the waste.
6. (Original) The method of claim 1, further comprising step of repeating the procedure at least daily.
7. (Original) The method of claim 1, wherein the procedure is conducted at home.
8. (Original) The method of claim 5, wherein the amount of the replacement fluid is approximately 9-13 liters.
9. (Original) The method of claim 5, wherein the replacement fluid is added to the blood after filtration.
10. (Original) The method of claim 1, further comprising the step of repeating the procedure for more than one week.
11. (Original) The method of claim 1, further comprising the steps of connecting the blood withdrawal line to the patient and connecting the blood return line to the patient.

12 (Original) the method of claim 11, wherein the blood withdrawal line and the blood return line are connected to the patient through a subcutaneous port.

13. (currently amended) ~~The method of claim 1, further comprising the steps of:~~ A method for hemofiltration, comprising the steps of:
withdrawing blood through a blood withdrawal line at a rate of at least 300 ml/min.;
passing the blood through a filter to remove waste;
and passing the filtered blood through a blood return line and into the patient, wherein blood is withdrawn from and returned to the patient continuously for about 1.5 hours, and wherein the blood flow rate is at least 400 ml./min.;
pumping the withdrawn blood with a pump at a predetermined blood flow rate;
measuring the actual blood flow rate delivered by the pump;
comparing the actual blood flow rate with the predetermined blood flow rate;
and activating an alarm when the difference between the actual blood flow rate with the predetermined blood flow rate exceeds a predetermined value.

14. (currently amended) The method of claim 1, wherein the blood withdrawal line and the blood return line are in registry with a said at least one pump and said at least one pump includes a peristaltic pump.

15. (original) The method of claim 1, wherein at least one of the blood withdrawal line and the blood return line further comprises a leak detector.

16. (currently amended) A method for hemofiltration, comprising the steps of: withdrawing blood through a blood withdrawal line at a rate of at least 300 ml/min.;
passing the blood through a filter to remove waste;
and passing the filtered blood through a blood return line and into the patient, wherein blood is withdrawn from and returned to the patient continuously for about 1.5 hours, and wherein the blood flow rate is at least 400 ml./min.;
wherein an amount of replacement fluid is added to the blood, and wherein the amount is determined by gravimetric balancing of the replacement fluid and the waste; wherein replacement fluid is delivered through a replacement fluid line, and wherein the replacement fluid line further comprises an ultrasonic detector to indicate when replacement fluid is empty.